

Electronic Audit of Emissions Data

Charlotte, NC

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Electronic Audit Goals

- ◆ Ensure Quality Of The Emissions Data
- ◆ Reduce Monitoring And Reporting Costs



Electronic Audit Objectives

- ◆ Identify Reporting Issues
 - Repetitious Errors
 - Honest Mistakes
 - Intentional Misrepresentations
 - Technology And Operational Trends Assessment
 - Find Opportunities For Reducing Measurement And Reporting



Potential Audit Products

- ◆ Need For Reporting, Rule Or Policy Adjustments
- ◆ Criteria For Field Audits
- ◆ Field Studies
- ◆ Training For Sources



Need For Reporting, Rule Or Policy Adjustments

- ◆ Reduced Reporting for Turbines
- ◆ By-pass Stacks
- ◆ MDC/EDR Changes
- ◆ Reduce The Number Of Recertification Events



Identify Criteria For Field Audits

- ◆ Percent Monitor Availability
- ◆ Extended Missing Data Periods
- ◆ Aborted Or Failed Linearities Or RATAs
- ◆ Missed Quarterly Linearity or Flow-to-Load Test
- ◆ Failed Daily Calibration Error Tests
- ◆ Miscalculated Emissions



Field Studies

- ◆ Do Particular Unit Configurations Match Up to Lower Emission Rates?
- ◆ Do Certain Types Of Monitors Or Source Pairings Result in Lower Emissions Or Lower Monitor Downtime?



Training For Sources

- ◆ Cylinder Gas Audits
- ◆ Record Types 614/615
- ◆ QA/QC Plans
- ◆ Other Areas

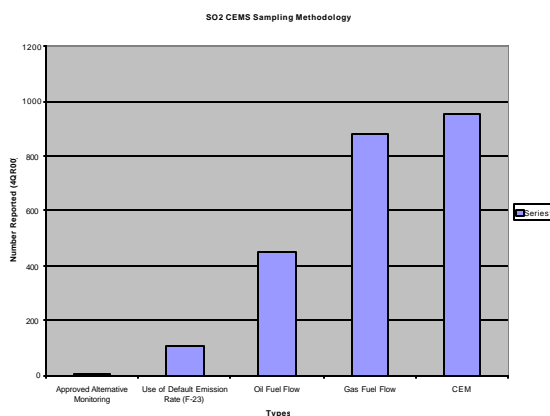


Examples Of Current Year Electronic Audit Activities

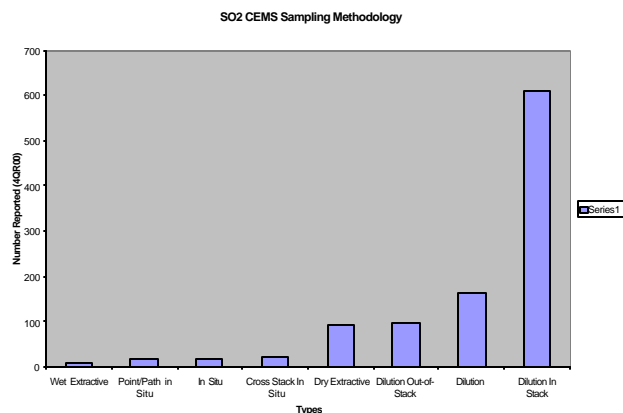
- ◆ Develop Industry Profiles
- ◆ Developed Targeting Criteria And Used Those Criteria To Identify Units For Field Audits
- ◆ Evaluating Petition Requests
- ◆ Characterizing Emissions Data To Establish Unit Classes
- ◆ Developing Suspect Data Criteria



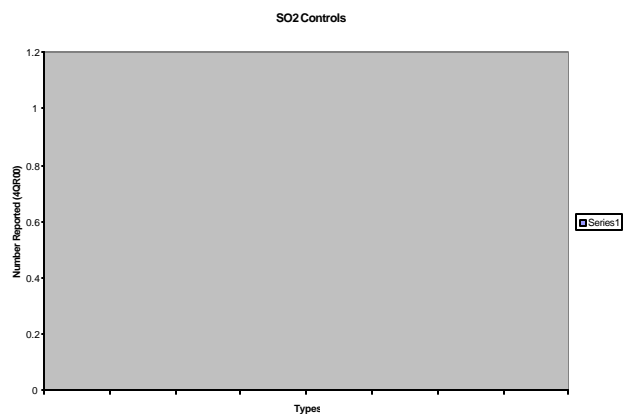
Sample Profiles



Sample Profiles



Sample Profiles

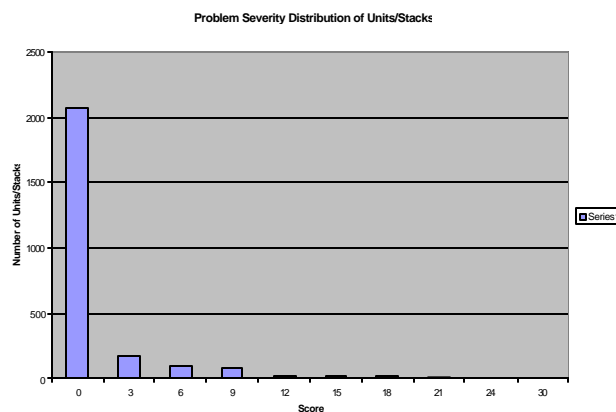


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Electronic Audit for Field Audits



Example Unit: Potential Problems

- ◆ PMA - Acceptable
- ◆ Missing Data Periods - Acceptable
- ◆ Failed Linearity or RATA - Acceptable
- ◆ Missing Lin/Flow-to-Load - Acceptable
- ◆ Daily Calibration Error
 - (Failed Between 10% and 15% of tests)
- ◆ Miscalculated Emissions Data - Acceptable



Example Unit: Significant Problems

- ◆ PMA
 - More Than One Parameter Less Than 90%
- ◆ Missing Data Periods
 - More Than Six Segments of 168 consecutive Hours Failed Linearity
- ◆ Failed RATA - Acceptable



Continued

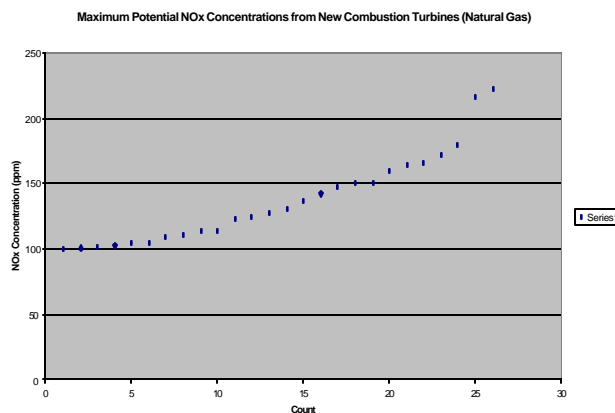
- ◆ Missing Lin/Flow-to-Load - Acceptable
- ◆ Daily Calibration Errors
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Evaluating Petition Requests



NOx MPC Study



Future Electronic Audit Investigation Topics

- ◆ Use Of Substitute Data Procedures
 - Maximum Potential Concentrations Application
 - Out of control periods
- ◆ Add on controls
 - Operating Trends
 - Maximum Expected Concentrations (MEC), etc.
- ◆ By-pass stack issues



Future Electronic Audit Investigation Topics

- ◆ Comparing Trends to Specific Units
- ◆ Monitoring Methodologies & Streamlining
- ◆ Technologies



Bottom Line

- ◆ We Are Using And Learning From The Data!

